ADOPTION OF SMART INITIATIVES IN DEVELOPING ANDERSON ROAD QUARRY SITE TOWARDS A SUSTAINABLE AND GREEN LIVING AREA

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Anderson Road Quarry (ARQ) Site
PROJECT BACKGROUND

Existing Use -- An Important Facility for supplying asphalt, concrete, and aggregate for Construction Industry Since 1950s.
PROJECT BACKGROUND

TAI SHEUNG TOK

Anderson Road Quarry (ARQ) Site

SAU MAU PING

KWUN TONG
PROJECT BACKGROUND – Proposed development

- **Land Platform**: 40 ha
- **Population**: 25 000
- **Commencement of works**: Dec 2016
- **First population intake**: 2023-24

OZP authorized in January 2016
TWM – Grey Water Recycling (for toilet flushing)

**Grey Water Treatment Plant**

**Reclaimed Water Pump Mains**

**Grey Water Collection Mains**

**Grey Water**

**Potable Water**

**Grey Water Treatment**

**Black Water**

~ 2,500 m³/day ARQ Site Flushing Demand

**100%**
GREEN INITIATIVES

TWM – Automatic Meter Reading & Water Intelligent Network

Automatic Meter Reading

➢ Water Conservation
➢ Water Supplies Management

Water Intelligent Network (WIN)

Water distribution network divided into 2000 District Metering Areas (DMA)/Pressure Management Areas (PMA)

Monitoring and sensing equipment
GREEN INITIATIVES

Low Impact Development (LID)

- Increase Unpaved Area and Infiltration
- Reduce Surface Runoff

Concept of Blue-Green Infrastructure:
- Rain garden
- Green roof
- Water harvesting
- Wetland
- Retention lake
- Eco-river channel
- Retention tank
- Porous pavement
- Bioswale
GREEN INITIATIVES

LID – Artificial Flood Attenuation Lake cum Park

RECREATION NODE - ATTENUATION LAKE
PERSPECTIVE
LID – Underground stormwater storage tank
GREEN INITIATIVES

LID – Bioretention System ("Bio-swales")

To purify surface runoff by biological means before discharging them into public drainage system.

Typical Cross Section of Roadside Bio-swales

Typical Cross Section of Roadside Gully
LID – Porous Pavement

➢ Increase stormwater infiltration
➢ Improve groundwater recharge
➢ Reduce ponding and heat island effect
GREEN INITIATIVES

LID – Flood Control & Revitalizing Tsui Ping River

Revitalizing Tsui Ping River
SMART INITIATIVES

Smart energy

PV panels on rock face/slope to be explored

Public Transport Terminus Cover
SMART INITIATIVES

Smart mobility - Cycling Mobility

- 2.6 km Dedicated Cycle Track
- ~ 160 Nos. Total Bike Parking Space
- Bike Rental System to be Explored

PUBLIC BIKE PARKING (CONFIRMED)
PUBLIC BIKE PARKING (TENTATIVE)
DEDICATED CYCLE TRACK
SMART INITIATIVES

Smart mobility - Pedestrian Mobility

ARQ SITE

Tower & Bridge

Escalator
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We will continue to develop Hong Kong into a sustainable and liveable Asia’s World City!
Thank you